CIN No. : U14102AP2007TTC054390

ANDHRA PRADESH GRANITE (MIDWEST) PRIVATE LIMITED

D.No. 8-2-684/3/25 & 26, Road No. 12, Banjara Hills, **Hyderabad** - 500 034.
Ph. : 040-23305194, 195, 196

Ref. :

Date .....

18.10.2017.

To
Ministry of Environments & Forests, Climate Change,
Regional Office,
1st & 2nd Floor, HEPC, Building, 34,
Cathedral Garden Road, Nungabakkam.
Chennai – 600034.

Respected Sir

Sub: Submission of EC Compliance from October-2016 to September-2017.

Ref: EC granted vide order no: SEIAA/AP/PKM-119/2013-1593 Govt. of India Ministry of Environmental & Forest, Date 10th June 2013.

Vide proceedings in the reference cited, please find the enclosed twelve months Environmenta l Clearene report from the period of October-2016 to September-2017. With all necessary enclosures for our M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd. (19.425 Ha Black Galaxy Granite Mine), Sy.NO-55/5P, R.L.Puram (V), Chimakurthy (M), Prakasam District. For favour of information.

1. EC Copy
2. EC Compliance
3. Monitoring reports

Thanking you,
Yours faithfully,
M/s Andhra Pradesh Granite (Midwest) Pvt. Ltd.

Authorized Person.

Manager Cum Agent 18/10/17
Andhra Pradesh Granite (Midwest) Pvt. Ltd.,
Survey No. 55/5
R.L. PURAM, Chimakurthy (M),
Prakasam District.

Copy to: SEIAA, Vijayawada.
APPCB, Regional Office, Prakasam.

M/s. Andhra Pradesh Granite (Midwest) Pvt Ltd,
(19.425 Ha Black Galaxy Granite Mine),
Sy. No. 55/5P, , R L Puram (V),
Chimakurthy(M), Prakasam District.

Order No: SEIAA/AP/PKM-119/2013-1593 Date:10.06.2013

Period of Compliance Report October 2016 to September'2017.

Compliance Status of the Environmental Clearance conditions		
	Conditions	Compliance
A Specific Conditions:		
a	Air Pollution :-	
i	Wet drilling & wire saw cutting method shall be adopted to control dust emissions. Delay detonators and shock tube initiation system for blasting shall be used so as to reduce vibration and dust.	Complied. Wire saw cutting method is adopted in the mine. Instead expansive motor will be used for separating mother rock. This will not have any vibrations and dust.
ii	Greenbelt shall be developed along the boundary of mining lease area with tall growing trees, with the native species in consultation with the local DFO/Agriculture Department.	As the total lease area is mineral bearing and rocky strata and plants survival is poor, so we have planted 50 plants near administrative building and North side of lease area & 100 plants of Nilagiri Plantation has done at Sy.No-954/1 of chimakurthy village, of chimakurthy madal, Prakasam Dist.
iii	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Regular water sprinkling is being done to control the emission.
iv	The proponent shall take appropriate measures to ensure that the GLC shall comply with the revised NAAQ norms notified by MoE&F, GoI on 16.11.2009.	Noted
v	The following measures are to be implemented to reduce air pollution during transportation of mineral:- • Roads shall be graded to mitigate the dust emission. • Water shall be sprinkled at regular interval on the main haul road and other service	Roads are being maintained properly. Regular Water sprinkling is done using tankers.

	roads by water sprinklers to suppress dust.	
Vi	The following measures are to be implemented to reduce Noise pollution:- • Proper and regular maintenance of vehicles and other equipment • Limiting time exposure of workers to excessive noise • The workers employed shall provided with protection equipment and earmuffs etc. • Speed of trucks entering or leaving the mine is to be limited to moderate speed of 25kmpl to prevent undue noise from empty trucks	✓ All vehicles and other instruments are regularly monitored for its smooth function. ✓ All workers are provided with protective equipments like gloves, boots, helmets, goggles. ✓ Drivers are being made aware to maintain vehicle speed at 25kmpl before entering will be complied.
Vii	Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010; dt. 11.01.2010 issued by the MoE&F, GOI to control noise to the prescribed levels. Workers engaged in operations of HEMM, etc should be provided with ear plugs/muffs.	Providing protective equipments. Noise Monitoring reports are attached as evidence as ANNEXURE _ II
b	**Water Pollution :-**	
i	The source of water is tankers. Total water requirement is 40.0 KLD. Out of that, 15.0 KLD is used for dust suppression; 3.0 KLD is used for development of green belt; 2.0 KLD is used for domestic purpose.20.0 is used for granite processing. Wastewater generated from the domestic section is to be disposed into septic tank followed by soak pit.	Follows, Wastewater is disposing into septic tank followed by soak pit.
ii	Garland drain and siltation ponds of appropriate size should be constructed for the working pit to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted, particularly after monsoon, and maintained properly.	Garland drains were provided along the dump and maintained properly in good condition.
iii	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells by the project proponent in and around project area in consultation with	Ground water quality is Quarterly monitored.

	Regional Director, CGWB, Southern Region, Hyderabad. Data thus collected should be sent at regular interval to MoEF, CGWA and CGWB, Southern Region, Hyderabad.	Water tanker is being used for water.
iv	Suitable conservation measures to augment groundwater resources in the area shall be planned and implemented in consultation with Regional Director, CGWB, Southern Region, Hyderabad. Suitable measures should be taken for rainwater harvesting.	Noted and will be complied
v	Permission from the competent authority should be obtained for drawl of ground water, if any, required for this project.	We are not drawing any ground water. Seepage water is using for wire saw processing, and for drinking and general utilization, we are using water, through tankers.
c	Solid Waste :-	
i	Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.	Complied top soil is using plantation.
ii	The following measures are to be adopted to control erosion of dumps:- Retention/toe walls shall be provided at the foot of the dumps. Worked out slopes are to be stabilized by planting appropriate shrub/grass species on the slopes.	Retention wall has been provided at the foot of the dump.
iii	Waste oils, used oils generated from the HEM machines, mining operations, if any, shall be disposed as per the Hazardous Wastes (Management, Handling, and trans boundary movement) Rules, 2008 and its amendments thereof to the recyclers authorized by APPCB.	Sold to authorized agencies
B General Conditions:		
i	This order is valid for a period of 20 years OR the expiry date of mine lease period issued by the Government of A.P., whichever is earlier. It was reported that the life of the mine is 1957 years.	Noted

ii	"Consent for Establishment" & "Consent for Operation" shall be obtained from Andhra Pradesh Pollution Control Board under Air and Water Act to carry on mining.	We already Obtained CFE vide no. is P-208/PCB/ZO-VJA/CFE/2013-1250, Dt :05.10.2013 and CFO Obtained from the Consent Departments vide no is APPCB/VJA/NLR/188/IND/CFO/2017 DT:CFO:02.06.2017, VALID UPTO 31ST DEC'-2022. • Please provide the updated valid CFO copy.
iii	No change in mining technology and scope of working should be made without prior approval of the SEIAA, A.P. No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, AP/ MoE&F, GoI, New Delhi, as applicable.	Noted .Mining technology and scope of working will not be changed without prior approval of the SEIAA,
iv	The half-yearly compliance reports in respect of the terms and conditions stipulated in this order & monitoring reports shall be uploaded in the website of the project periodically. It shall simultaneously be submitted in hard and soft copies to the SEIAA and Ministry's Regional office, Bangalore on 1st June and 1st December of each calendar year.	Noted. Compliance reports in respect of terms and conditions and monitoring reports will be uploaded in the website and Hard copies submitted to SEIAA and Ministry's regional Office.
v	Officials from the Regional Office of MoE&F, Bangalore who would be monitoring the implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents shall be submitted to the CCF, Regional Office to MoE&F, Bangalore.	When visited the Officials from the regional office MoEF , we will give the full cooperation , facilities and documents/data during the inspection.
vi	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Air quality is Quarterly monitored. Test Reports are attached as ANNEXURE – I
vii	Data on ambient air quality should be regularly submitted to the Ministry including its Regional Office located at Bangalore and the State Pollution Control Board/ Central Pollution Control Board	Air quality is Quarterly monitored and all parameters are within the prescribed limit as per CPCB Standards.

	once in six months.	Test reports are attached in Annexure –I
viii	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	PPE are being provided.
ix	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	Noted and complied
x	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Occupational health surveillance program of the workers conducted on 17.10.2016 for 201 Nos. **THIS PROGRAMME I S VALID UPTO 17.10.2021.** The above programme is valid ? or if conducted recently ., provide the details.
xi	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	Noted and complied.
xii	The funds earmarked for environmental protection measures (Capital cost & Recurring cost of Rs 3.0 lakhs /annum) should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bangalore.	Complied Provide the details funds earmarked during the period
xiii	The project proponent shall submit the copies of the environmental clearance to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied
xiv	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the	Complied, Copy attached as ANNEXURE-IV.

	clearance letter is available with the State Pollution Control Board and SEIAA, A.P.	
xv	The SEIAA or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	The condition is "Noted" and assured to abide by the condition
xvi	The proponent shall obtain all other mandatory clearances from respective departments.	The unit has obtained consent & authorization from the competent authority.
xvii	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil)No.460 of 2004 as may be applicable to this project	There is no wild life sanctuary/critically polluted area/ecologically sensitive zone within 10km from the boundary of the ML area.
xviii	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted
xix	Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	The condition is "Noted" and assured to abide by the condition.
xx	The SEIAA may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	The condition is "Noted" and assured to abide by the condition.
xxi	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (ProteZtion) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Complied

Authorized Signature 18/1/C

Manager Cum Agent
Andhra Pradesh Granite (Private) Pvt.Ltd.,
Survey No. 55/5
R.L. PURAM, Chimakurthy (M),
Prakasam District

Sanathnagar, Hyderabad - 500 016
Phone : 040-23887500, Website : www.appcb.ap.nic.in

RED CATEGORY
RENEWAL OF CONSENT & AUTHORIZATION ORDER
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No: APPCB/VJA/NLR/188/HO/CFO/2017- Date: 02.06.2017

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 & Amendments thereof and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to

M/s. Andhra Pradesh Granite (Mid West) Pvt. Ltd.,
Sy. No. 55/5P, Rajupalem – Lakshmipuram (V),
Chimakurthy (M), Prakasam District – 523 226, A.P
E-mail: ram@midwestgranite.com

The Consent Order No: P-188/PCB/ZO-VJA/CFO/W&A/2014-2328, dated 03.03.2015 issued to the industry, having validity upto 31.07.2017, stands cancelled.

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

(i) Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge	Point of Disposal
1	Domestic	1.5 KLD	Septic tank followed by soak pit

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow (m^3/hr)
1	Common stack attached to 200 KVA & 125 KVA D.G. sets	-

iii) Hazardous Waste Authorisation (Form – II) [See Rule 6 (2)]:

M/s. Andhra Pradesh Granite (Mid West) Pvt. Ltd. (19.425 Ha), Prakasam District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

- **Hazardous Wastes With Disposal Option:**

S. No	Name of Hazardous Waste	Stream	Quantity	Method of disposal
1	Used oil	5.1 of Schedule-I	500 LPA	Disposed to authorized reprocessing agencies.

This consent order is valid for Mining the following quantities only:

S. No	Product	Quantity
	Mining of Black Galaxy Granite of	
1.	Primary Blocks	540 m^3/annum
2.	Secondary Blocks	486 m^3/annum

This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorization shall be valid for a period ending with the 31st July 2022.

Sd/-
MEMBER SECRETARY

To

M/s. Andhra Pradesh Granite (Mid West) Pvt. Ltd.,
Sy. No. 55/5P, Rajupalem – Lakshmipuram (V),
Chimakurthy (M), Prakasam District – 523 226, A.P

//T.C.F.B.O//

3/6/17

Joint Chief Environmental Engineer
(UH: IV)

SCHEDULE-A

1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
2. The industry shall carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
3. The industry shall put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.
4. Not withstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
5. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.
6. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E (P) Rules, 1986 & amendments thereof.
7. The applicant shall make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized shall not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
8. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.

Water Pollution:

1. The following limits are prescribed for water consumption:

S. No	Purpose	Quantity
1.	Drilling & Washings (Wire saw cutting)	10.0 KLD
2.	Green belt (Dust suppression & Gardening)	3.0 KLD
3.	Domestic	2.0 KLD
	Total	**15.0 KLD**

Separate meter with necessary pipe-line shall be maintained for assessing the quantity of water used for the purposes mentioned above for Cess assessment purpose.

2. The mining operations shall cause ground water pollution in and around the Mining Unit Premises.

Air Pollution:

3. The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

Chimney No.	Parameter	Emission Standards
1	Particulate matter	115 mg/Nm^3

4. The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10 µm) - 100 µg/ m3; PM2.5 (Particulate Matter size less than 2.5 µm) - 60 µg/ m3; SO2 - 80 µg/m3; NOx - 80 µg/m3, outside the factory premises at the periphery of the industry.

Standards for other parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

Noise level in ambient air: Day time (6 AM to 10 PM) - 75 dB (A)
Night time (10 PM to 6 AM) - 70 dB (A)

5. The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets of capacity more than 800 KW shall conform with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 under S.no.96, under the Environment (Protection) Act, 1986.

6. Drills should be wet-jacketed. Local exhaust ventilation systems should be installed at dust generation points and the dust is led to a dust collection system.

7. The mining unit shall provide water sprinklers for wetting the roads and at dust generating sources to control fugitive dust emissions.

General:

8. **The industry shall handover the Original Consent order dated 03.03.2015 to the RO: Nellore at the time of this CFO order.**

9. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
   a. Daily production details (ER-1 Central Excise Returns).
   b. Quantity of effluents generated, treated, recycled/reused and disposed.
   c. Log books of pollution control systems.
   d. Characteristics of ambient air, effluents and emissions.
   e. Hazardous solid waste generated and disposed.
   f. Inspection book.
   g. Monthly returns of hazardous waste.

10. The industry shall dispose solid waste (NON HAZARDOUS) as follows:

S. No	Name of the Solid Waste	Quantity	Disposal
1.	Over Burden & Mine rejects	523830 Cum/annum	Used for land fill in low laying areas.

to 7.5 [illegible] commensurate within the Mining Lease Area at Sy. No.238/1 [illegible] Kadapa District.

12. All [illegible] OB, rejects, irrespective of size and quality, shall be hauled away [illegible]

13. Dump [illegible] shall be done shall be use the retreating pyramid bench formation concurrently [illegible] ecological reclamation. Dumps shall be contoured and provided relief [illegible] Dump tops shall be compacted leveled and be properly drained.

14. The Mining [illegible] necessary practical steps for prevention of oil spillages and scarry over on [illegible]

15. The mineral [illegible] be stacked in earmarked as per approval mining plan.

16. Mining shall [illegible] as per **approved mining plan.**

17. Suitable [illegible] shall be planted on either side of the haul roads.

18. Green belt [illegible] developed at possible areas around the boundary.

19. The industry [illegible] with standards and directions issued by CPCB / MoEF & CC as and when [illegible] issued.

20. The industry [illegible] compliance report on the conditions mentioned in the consent Order every six [illegible] of January and July of every year to the Regional Office/ Zonal Office.

SCHEDULE – C

[See rule 6 (2)]

[CONDITIONS FOR CONSENT FOR AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of Hazardous Wastes should be followed.

2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

3. The industry shall dispose Waste Oil and Used Lead Acid Batteries in a secured way in their premises only to the manufacturers / dealers on buyback basis.

4. The industry shall follow the system of copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports the Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.

5. The industry shall maintain proper records for Hazardous and Other Wastes stated in Authorisation, Form-3 (MPCB), quantity of Incinerable waste, land disposal waste, recyclable waste etc., and submit annual returns in Form- 4 as per Rule 20 (2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

Sd/-
MEMBER SECRETARY

To

M/s. Andhra Pradesh Granite (Mid West) Pvt. Ltd.,
Sy. No. 55/5P, Rajupalem (V), Lakshmipuram (V),
Chimakurthy (M), Prakasam District – 523 226, A.P

//T.C.F.B.O//

3/6/17

for **Chief Environmental Engineer**
(UH: IV)

State Level Environment Impact Assessment Authority (SEIAA)
Andhra Pradesh
Government of India
Ministry of Environment & Forests
A-3, Industrial Estate, Sanathnagar, Hyderabad- 500 018.

REGD.POST WITH ACK.DUE

Order No. SEIAA/AP/PKM- 119/2013 1593 Dt: 10.06.2013

Sub: **SEIAA, A.P. - 19.425 Ha. Black Galaxy Granite Mine of M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd., Sy.No. 55/5P, RL Puram (V), Chimakurthy (M) Prakasam District - Environmental Clearance – Issued - Reg.**

I. This has reference to your application submitted vide lr. dt. Nil received on 13.09.2013 in this regard, seeking Environmental Clearance for the proposed **Black Galaxy Granite Mine** in favour of **M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd., Sy.No. 55/5P, RL Puram (V), Chimakurthy (M) Prakasam District.** It was reported that the nearest human habitations viz., Rajupalem Lakshimipuram (RL. Puram) (V) exists at a distance of about 1.0 km from the mine lease area. It was also reported that Devmupalem Reserve Forest is at a distances of 1.7 km from the mine lease area. It was also reported that Minor Irrigation Canal & Nagarjunasagar Right Bank Canal is at a distances of 0.3 km & 0.5 km from the mine lease area and Several other water bodies exist within 10 km around the mine lease area. It was noted that the capital investment of the project is Rs. 3051.97 Lakhs and capacity of the project is as follows:

Mining of Black Galaxy Granite:
Primary Blocks - 540 m^3/Annum.
Secondary Blocks - 486 m^3/Annum.

II. It is a semi-mechanized opencast quarry with linear bench cutting. The Blocks are cut by using jack hammer drilling and wedge-cutting. The separated blocks are dressed manually. It is reported that the life of the Mine is estimated as 1957 years. The total mine lease area is 19.425 Ha.

I. The proposal has been examined and processed in accordance with EIA Notification, 2006 and its amendments thereof. The State Level Expert Appraisal Committee (SEAC) examined the application, in its meetings held on 18.10.2012 & 06.12.2012. The Sub-committee constituted by the SEAC inspected the site on 12.11.2012 and submitted the report. The project is exempted from the process of public hearing as the mining lease area is less than 25 Ha., in accordance with the guidelines approved by the SEIAA, AP for processing the applications of mining projects. Based on the information furnished, presentation made by the proponent and the consultant M/s. Bhagavathi Ana Labs Ltd., Hyderabad; inspection report of the Sub-Committee; the Committee considered the project proposal and recommended for issue of Environmental Clearance. The State Level Environment Impact Assessment Authority (SEIAA), in its meeting held on 22.12.2012 examined the proposal and the recommendations of SEAC and decided to issue Environmental Clearance subject to submission of commitment by the proponent. The proponent vide lr. dt. 21.05.2013 submitted a commitment in compliance with O.M. dt. 16.11.2010 issued by MoE&F, GOI, New Delhi. The SEIAA, A.P **hereby accords Environmental Clearance to the project** as mentioned at Para no. I under the provisions of the EIA Notification 2006 and its subsequent amendments issued under Environment (Protection) Act, 1986 subject to implementation of the following specific and general conditions:

A. Specific Conditions:

a) Air Pollution:-

i. Wet drilling & wire saw cutting method shall be adopted to control dust emissions. Delay detonators and shock tube initiation system for blasting shall be used so as to reduce vibration and dust.

ii. Greenbelt shall be developed along the boundary of mining lease area with tall growing trees, with the native species in consultation with the local DFO/Agriculture Department.

iii. Fugitive dust emissions from all the sources should be controlled regularly. Water

spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.

iv. The proponent shall take appropriate measures to ensure that the GLC shall comply with the revised NAAQ norms notified by MoE&F, GoI on 16.11.2009.

v. The following measures are to be implemented to reduce air pollution during transportation of mineral:-

- Roads shall be graded to mitigate the dust emission.
- Water shall be sprinkled at regular interval on the main haul road and other service roads by water sprinklers to suppress dust.

vi. The following measures are to be implemented to reduce Noise pollution:-

- Proper and regular maintenance of vehicles and other equipment
- Limiting time exposure of workers to excessive noise.
- The workers employed shall be provided with protection equipment and earmuffs etc.
- Speed of trucks entering or leaving the mine is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.

vii. Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010; dt. 11.01.2010 issued by the MoE&F, GOI to control noise to the prescribed levels. Workers engaged in operations of HEMM, etc should be provided with ear plugs/muffs.

b) **Water Pollution:-**

i. The source of water is tankers. Total water requirement is 40.0 KLD. Out of that, 15.0 KLD is used for dust suppression; 3.0 KLD is used for development of green belt; 2.0 KLD is used for domestic purpose; 20.0 is used for granite processing plant. Wastewater generated from the domestic section is to be disposed into septic tank followed by soak pit.

ii. Garland drain and siltation ponds of appropriate size should be constructed for the working pit to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted, particularly after monsoon, and maintained properly.

iii. Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells by the project proponent in and around project area in consultation with Regional Director, CGWB, Southern Region, Hyderabad. Data thus collected should be sent at regular interval to MoEF, CGWA and CGWB, Southern, Region, Hyderabad.

iv. Suitable conservation measures to augment groundwater resources in the area shall be planned and implemented in consultation with Regional Director, CGWB, Southern Region, Hyderabad. Suitable measures should be taken for rainwater harvesting.

v. Permission from the competent authority should be obtained for drawl of ground water, if any, required for this project.

c) **Solid Waste :-**

i. Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.

ii. The following measures are to be adopted to control erosion of dumps:-

- Retention/toe walls shall be provided at the foot of the dumps.
- Worked out slopes are to be stabilized by planting appropriate shrub/grass species on the slopes.

iii. Waste oils, used oils generated from the EM machines, mining operations, if any, shall be disposed as per the Hazardous Wastes (Management, Handling, and transboundary movement) Rules, 2008 and its amendments thereof to the recyclers authorized by APPCB.

B. General Conditions:

i. **This order is valid for a period of 20 years OR the expiry date of mine lease period issued by the Government of A.P., whichever is earlier.** It was reported that the life of the mine is 1957 years.

ii. "Consent for Establishment" & "Consent for Operation" shall be obtained from Andhara Pradesh Pollution Control Board under Air and Water Act to carry on mining.

iii. No change in mining technology and scope of working should be made without prior approval of the SEIAA, A.P. No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, AP/ MoE&F, GoI, New Delhi, as applicable.

iv. The half-yearly compliance reports in respect of the terms and conditions stipulated in this order & monitoring reports shall be uploaded in the website of the project periodically. It shall simultaneously be submitted in hard and soft copies to the SEIAA and Ministry's Regional office, Bangalore on 1st June and 1st December of each calendar year.

v. Officials from the Regional Office of MoE&F, Bangalore who would be monitoring the implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents shall be submitted to the CCF, Regional Office to MoE&F, Bangalore.

vi. Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.

vii. Data on ambient air quality should be regularly submitted to the Ministry including its Regional Office located at Bangalore and the State Pollution Control Board/ Central Pollution Control Board once in six months.

viii. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

ix. The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.

x. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

xi. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.

xii. The funds earmarked for environmental protection measures (Capital cost & Recurring cost of Rs 3.0 lakhs/annum) should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bangalore.

xiii. The project proponent shall submit the copies of the environmental clearance to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant

offices of the Government who in turn has to display the same for 30 days from the dates of receipt.

xiv. The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and SEIAA, A.P.

xv. The SEIAA or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

xvi. The proponent shall obtain all other mandatory clearances from respective departments.

xvii. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

xviii. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

xix. Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xx. The SEIAA may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

xxi. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

Sd/-	Sd/-	Sd/-
MEMBER SECRETARY	MEMBER	CHAIRMAN,
SEIAA, A.P.	SEIAA, A.P.	SEIAA, A.P.

To
M.Ramachandra. Mg. Director,
M/s. Midwest Granite Pvt. Ltd.,
(19.425 Ha. Black Galaxy Granite Mine),
D.No. 8-2-684/3/25 & 26, Road No. 12,
Banjara Hills, Hyderabad – 500034.
e-mail: ram@midwestgranite.com

// T.C.F.B.O//

Jt. Chief Environmental Engineer
(UH-I)

KIWIS
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TEST REPORT

Report No: KIWIS/AEMA/AAQ/17/74/6

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report	: 26-06-2017	*Sample Collected by*	: *Kiwis Eco Laboratories Private Limited*
Sampling date	: 13-06-2017	*Sample Condition*	: *Samples received in Self sealed Covers and Sample Bottles*
Sampling Duration	: 24Hrs	*Sampling Procedure*	: *CPCB Guidelines (NAAQMS/36/2012-13)*
Sample received on	: 15-06-2017	*Weather Conditions*	: *Dry*
Analysis starting date	: 15-06-2017	*Sample registration no*	: *AAQ/06/17/170/15,170/16,170/17& 170/18*
Analysis completion date	: 21-06-2017	*Temperature & Humidity*	: *30.1°C & 60%*
Sub Contract Testing	: *NA*	*Sample description/Code*	: *Ambient Air Quality Monitoring*

Locations:

1. *PROJECT SITE* : *AAQ/06/17/170/15: APGPL/AAQ/13/06/2017/01*
2. *MAIN GATE* : *AAQ/06/17/170/16: APGPL/AAQ/13/06/2017/02*
3. *RL PURAM (VIL)* : *AAQ/06/17/170/17: APGPL/AAQ/13/06/2017/03*
4. *CHIMAKURTHI (VIL)* : *AAQ/06/17/170/18: APGPL/AAQ/13/06/2017/04*

TEST RESULT

Samples are analyzed "as is where basis is"

S. No	Parameter	Method	Units	Result				Standards
				Project site	Main Gate	RL Puram Village	Chimakurthi Village	
1	PM_{10}	IS 5182: Part 23 : 2006	µg/m³	68.2	58.4	49.7	51.5	100
2	$PM_{2.5}$	CPCBs Guidelines Volume – 1 (2012-13)	µg/m³	25.4	21.2	19.2	20.3	60
3	SO_2	IS 5182: Part 2 : 2001	µg/m³	14.3	11.9	11.8	11.8	80
4	NO_x	IS 5182:Part 6 :2006	µg/m³	17.2	14.3	13.2	13.6	80
5	CO	CO Analyzer	mg/m³	0.6	0.5	<0.1	<0.1	02

Opinion and interpretation: Nil

NA: Not Applicable

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PM_{10} Instrument Model: Lata Envirotech APM-860, Calibration valid up to: 17-08-2017
$PM_{2.5}$ Instrument Model: Lata Envirotech APM-154, Calibration valid up to: 17-08-2017
CO Analyzer Instrument Model: VS70-CO, Calibration valid up to: 28-02-2018

Checked By
(N.Kamalakar)
Sr.Chemist

Authorized Signatory
(N.P.Viswanath)
Manager Laboratory

End of the Report

Note: This report is subject to the terms and conditions mentioned overleaf

KIWIS
ECO LABORATORIES PVT LTD
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Certified by ISO 9001 & 18001

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TEST REPORT

Report No: KIWIS/ AEMA/Noise/17/63/6

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest)Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report : 26-06-2017

Date of Monitoring : 13-06-2017

Sample Registration No : *Noise/06/17/108/15, 108/16, 108/17 & 108/18*

Sample Collected By : *Kiwis Eco Laboratories Private Limited*

Sample Description/Code : *Noise Monitoring*

Sub Contract Testing : *NA*

Location:

1. *Main Gate* : *Noise/06/17/108/15: APGPL/Noise/13/06/2017/01*
2. *Project Site* : *Noise/06/17/108/16: APGPL/Noise/13/06/2017/02*
3. *RL Puram Village* : *Noise/06/17/108/17: APGPL/Noise/13/06/2017/03*
4. *Chimakurthi Village* : *Noise/06/17/108/18: APGPL/Noise/13/06/2017/04*

TEST RESULT

S.No	Location	Day time dB(A)Leq	Night time dB(A)Leq	CPCB Standards	
				Day dB (A)	Night dB(A)
1	Main Gate	66.3	59.2	75	70
2	Project Site	71.2	65.8	75	70
3	RL Puram village	53.0	42.1	55	45
4	Chimakurthi village	52.1	42.0	55	45

Opinion and interpretation: Nil

NA: Not Applicable

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Integrated Sound Level Meter, Make: HTC, Model No: SL 1352, Calibration valid up to: 20-02-2018

Checked By
N. Kamal
(N.Kamalakar)
Sr.Chemist

Authorized Signatory
(N.P.Viswanath)
Manager Laboratory

End of the Report

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TEST REPORT

Report No: KIWIS/AEMA/S/17/29/6

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District,
Andhra Pradesh.

Date of report	: 26-06-2017	*Sample Collected by*	: *Kiwis Eco Laboratories Private Limited*
Date of sampling	: 14-06-2017	*Sample Condition*	: *Samples received in Plastic Covers*
Sample received on	: 15-06-2017	*Sampling Procedure*	: *KIWIS/SOP/ Lab - 258*
Analysis starting date	: 15-06-2017	*Sample registration no*	: *S/06/17/29/6*
Analysis completion date	: 21-06-2017	*Sample description/Code*	: *Soil Quality Monitoring At Project Site*
Sub Contract Testing	: NA		

1. SOIL: S/06/17/29/6 : APGPL/14/06/2017/01(At Project Site)

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TEST REPORT

Report No: KIWIS/AEMA/S/17/29/6

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result
1	*pH*	-	*IS 2720 (Part 26)-1987 (RA:2002)*	7.74
2	*Moisture Content*	%	*IS 9235-1979*	5.90
3	*Organic carbon*	%	*IS 2720 (part 22) – 1972 (RA:2010)*	0.23
4	*Ava. Calcium as Ca*	*mg/kg*	*STIDA&CGI*	534.01
5	*Ava. Magnesium as Mg*	*mg/kg*	*STIDA&CGI*	219.01
6	*Ava. Nitrogen as N*	*Kg/Hac*	*IS 14684:1999, RA 2008*	20.17
7	*Ava. Phosphates as P*	*Kg/Hac*	*STIDA&CGI*	19.70
8	*Ava. Potassium as K*	*Kg/Hac*	*FAO 2007*	25.74
9	*Cadmium as Cd*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7130*	<2.0
10	*Chromium as Cr*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7190*	<2.0
11	*Nickel as Ni*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7520*	<2.0
12	*Lead as Pb*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7420*	<2.0
13	*Copper*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7210*	<2.0
14	*Zinc as Zn*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7950*	30.82

Opinion and interpretation: Nil

NA: Not Applicable

- Reports pertained only to the submitted sample
- Test reports shall not be reproduced except in full, without written approval of the laboratory

STIDA&CGI: Soil Testing in India; Department of Agriculture & Cooperation Ministry of Agriculture Government of India

Checked By

(N.Kamalakar)
Sr.Chemist

Authorized Signatory

(N.P.Viswanath)
Manager Laboratory

End of the Report

Note: This report is subject to the terms and conditions mentioned overleaf

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TEST REPORT

Report No: KIWIS/AEMA/ W/17/74/9

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report	*: 26-06-2017*	*Sample Collected by*	*: Kiwis Eco Laboratories Private Limited*
Date of sampling	*: 14-06-2017*	*Sample Condition*	*: Samples received in Plastic bottles*
Sample received on	*: 15-06-2017*	*Sampling Procedure*	*: KIWIS/SOP/Lab - 258*
Analysis starting date	*: 15-06-2017*	*Sample registration no*	*: W/06/17/126/8*
Analysis completion date	*: 21-06-2017*	*Sample description/Code*	*: Water Quality Monitoring*
Sub Contract Testing	*: NA*		*At RL Puram Village, Ground Water*

1. W/06/17/126/8 : APGPI/14/06/2017/01 (Ground Water)

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result	IS 10500 Acceptable Limits	IS 10500 Permissible Limits
1	Color	CU	APHA 2120 C	<5.0	5	15
2	pH @ 26.1°C	-	APHA 4500H+ B	7.54	6.5-8.5	No relaxation
3	Turbidity	NTU	APHA 2130 B	<1.0	1	5
4	Electrical Conductivity	µMho/cm	APHA 2510 - B	1105	Not Specified	Not Specified
5	Total Dissolved Solids	mg/L	APHA 2540 C	640	500	2000
6	Total Suspended Solids	mg/L	APHA 2540 D	<10	Not Specified	Not Specified
7	Alkalinity as $CaCO_3$	mg/L	APHA 2320 B	303	200	600
8	Hardness as $CaCO_3$	mg/L	APHA 2340 C	431.64	200	600
9	Calcium as Ca	mg/L	APHA 3500 Ca B	73.01	75	200

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TEST REPORT

Report No: KIWIS/AEMA/ W/17/74/9

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result	IS 10500 Acceptable Limits	IS 10500 Permissible Limits
10	Magnesium as Mg	mg/L	APHA 3500-Mg B	60.62	30	100
11	Chlorides as Cl^-	mg/L	APHA 4500 Cl^- C	85.97	250	1000
12	Sulphates as SO_4	mg/L	APHA 4500 SO_4 D	78.61	200	400
13	Nitrate as NO_3	mg/L	APHA 4500 NO_3 B	24.36	45	No relaxation
14	Sodium as Na	mg/L	APHA 3500 Na B	48.50	Not Specified	Not Specified
15	Potassium as K	mg/L	APHA 3500 K B	3.50	Not Specified	Not Specified
16	Fluoride as F	mg/L	APHA 4500F- D	0.65	1.0	1.5
17	Iron as Fe	mg/L	APHA 3500 Fe B	0.53	0.3	No relaxation
18	Chromium as Cr^{+6}	mg/L	APHA 3500 Cr B	<0.05	0.05	No relaxation
19	Zinc as Zn	mg/L	APHA 3111 B	<0.2	5	15
20	Lead as Pb	mg/L	APHA 3111 B	<0.01	0.01	No relaxation
21	Manganese as Mn	mg/L	APHA 3111 B	<0.1	0.1	0.3
22	Cadmium as Cd	mg/L	APHA 3111 B	<0.003	0.003	No relaxation
23	Copper as Cu	mg/L	APHA 3111 B	<0.05	0.05	1.5
24	Cyanide as CN^-	mg/L	APHA 4500 CN^- C, E	<0.05	0.05	No relaxation

Methods follow: APHA 22nd Edition
NA: Not Applicable
Opinion and interpretation: Nil

- Reports pertained only to the submitted sample
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Checked By
N. Kamalakar
(N.Kamalakar)
Sr.Chemist

Authorized Signatory
(N.P.Viswanath)
Manager Laboratory

End of the Report

Note: This report is subject to the terms and conditions mentioned overleaf.

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TEST REPORT

Report No: KIWIS/ AEMA/Noise/17/233/5

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest)Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report : 25-03-2017

Date of Monitoring : 13-03-2017

Sample Registration No : Noise/03/17/586, 587, 588 & 589

Sample Collected By : Kiwis Eco Laboratories Private Limited

Sample Description/Code : Noise Monitoring

Sub Contract Testing : NA

Location:

1. Main Gate : Noise/03/17/586: APGPL/Noise/13/03/2017/01
2. Project Site : Noise/03/17/587: APGPL/Noise/13/03/2017/02
3. RL Puram Village : Noise/03/17/588: APGPL/Noise/13/03/2017/03
4. Chimakurthi Village : Noise/03/17/589: APGPL/Noise/13/03/2017/04

TEST RESULT

S.No	Location	Day time dB(A)Leq	Night time dB(A)Leq	CPCB Standards	
				Day dB (A)	Night dB(A)
1	Main Gate	67.1	59.5	75	70
2	Project Site	72.3	66.3	75	70
3	RL Puram village	53.1	43.4	55	45
4	Chimakurthi village	52.9	43.2	55	45

Opinion and interpretation: Nil

NA: Not Applicable

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Integrated Sound Level Meter, Make: HTC, Model No: SL 1352, Calibration valid up to: 20-02-2018

Checked By

(N.Kamalakar)
Sr.Chemist

Authorized Signatory

(N.P.Viswanath)
Manager Laboratory

End of the Report

Note: This report is subject to the terms and conditions mentioned overleaf

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TEST REPORT

Report No: KIWIS/AEMA/ S/17/93/43

Name and address of the client

M/s. Andhra Pradesh Granite
(Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report	*: 25-03-2017*	*Sample Collected by*	*: Kiwis Eco Laboratories Private Limited*
Date of sampling	*: 13-03-2017*	*Sample Condition*	*: Samples received in Plastic Covers*
Sample received on	*: 16-03-2017*	*Sampling Procedure*	*KIWIS/SOP/ Lab - 258*
Analysis starting date	*: 16-03-2017*	*Sample registration no*	*: S/03/17/124*
Analysis completion date	*: 23-03-2017*	*Sample description/Code*	*: Soil Quality Monitoring At Project Site*
Sub Contract Testing	*: NA*		

1. SOIL: S/03/17/124 : APGPL/13/03/2017/01(At Project Site)

Note: This report is subject to the terms and conditions mentioned overleaf

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TEST REPORT

Report No: KIWIS/AEMA/S/17/93/43

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result
1	*pH*	-	*IS 2720 (Part 26)-1987 (RA:2002)*	7.56
2	*Moisture Content*	%	*IS 9235-1979*	6.92
3	*Organic carbon*	%	*IS 2720 (part 22) - 1972 (RA:2010)*	0.24
4	*Ava. Calcium as Ca*	*mg/kg*	*STIDA&CGI*	491.66
5	*Ava. Magnesium as Mg*	*mg/kg*	*STIDA&CGI*	211.54
6	*Ava. Nitrogen as N*	*Kg/Hac*	*IS 14684:1999, RA 2008*	21.94
7	*Ava. Phosphates as P*	*Kg/Hac*	*STIDA&CGI*	16.79
8	*Ava. Potassium as K*	*Kg/Hac*	*FAO 2007*	27.99
9	*Cadmium as Cd*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7130*	<2.0
10	*Chromium as Cr*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7190*	<2.0
11	*Nickel as Ni*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7520*	<2.0
12	*Lead as Pb*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7420*	<2.0
13	*Copper*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7210*	<2.0
14	*Zinc as Zn*	*mg/kg*	*USEPA 3050B & USEPA SW 846 : 7950*	29.8

Opinion and interpretation: Nil

NA: Not Applicable

- Reports pertained only to the submitted sample
- Test reports shall not be reproduced except in full, without written approval of the laboratory

STIDA&CGI: Soil Testing in India; Department of Agriculture & Cooperation Ministry of Agriculture Government of India

Checked By

(N.Kamalakar)
Sr.Chemist

Authorized Signatory

(N.P.Viswanath)
Manager Laboratory

End of the Report

KIWIS
ECO LABORATORIES PVT LTD
Recognized by MoEF, GOI
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TEST REPORT

Report No: KIWIS/AEMA/ W/17/339/8

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result	IS 10500 Acceptable Limits	IS 10500 Permissible Limits
10	Magnesium as Mg	mg/L	APHA 3500-Mg B	45.15	30	100
11	Chlorides as Cl^-	mg/L	APHA 4500 Cl^- C	82.18	250	1000
12	Sulphates as SO_4	mg/L	APHA 4500 SO_4 D	62.97	200	400
13	Nitrate as NO_3	mg/L	APHA 4500 NO_3 B	23.40	45	No relaxation
14	Sodium as Na	mg/L	APHA 3500 Na B	69.10	Not Specified	Not Specified
15	Potassium as K	mg/L	APHA 3500 K B	3.80	Not Specified	Not Specified
16	Fluoride as F	mg/L	APHA 4500F- D	0.53	1.0	1.5
17	Iron as Fe	mg/L	APHA 3500 Fe B	0.56	0.3	No relaxation
18	Chromium as Cr^{+6}	mg/L	APHA 3500 Cr B	<0.05	0.05	No relaxation
19	Zinc as Zn	mg/L	APHA 3111 B	<0.2	5	15
20	Lead as Pb	mg/L	APHA 3111 B	<0.01	0.01	No relaxation
21	Manganese as Mn	mg/L	APHA 3111 B	<0.1	0.1	0.3
22	Cadmium as Cd	mg/L	APHA 3111 B	<0.003	0.003	No relaxation
23	Copper as Cu	mg/L	APHA 3111 B	<0.05	0.05	1.5
24	Cyanide as CN^-	mg/L	APHA 4500 CN^- C, E	<0.05	0.05	No relaxation

Methods follow: APHA 22nd Edition
NA: Not Applicable
Opinion and interpretation: Nil

- Reports pertained only to the submitted sample
- Test reports shall not be reproduced except in full, without written approval of the laboratory

Checked By
(N.Kamalakar)
Sr.Chemist

Authorized Signatory
(N.P.Viswanath)
Manager Laboratory

End of the Report

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TEST REPORT

Report No: KIWIS/AEMA/AAQ/17/448/5

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report : 25-03-2017
Sampling date : 13-03-2017
Sampling Duration : 24Hrs
Sample received on : 13-03-2017
Analysis starting date : 13-03-2017
Analysis completion date : 18-03-2017
Sub Contract Testing : NA

Sample Collected by : Kiwis Eco Laboratories Private Limited
Sample Condition : Samples received in Self sealed Covers and Sample Bottles
Sampling Procedure : CPCB Guidelines (NAAQMS/36/2012-13)
Weather Conditions : Dry
Sample registration no : AAQ/03/17/991, 992, 993 & 994
Temperature & Humidity : 35.1°C & 52%
Sample description/Code : Ambient Air Quality Monitoring

Locations:

1. PROJECT SITE : AAQ/03/17/991: APGPL/AAQ/13/03/2017/01
2. MAIN GATE : AAQ/03/17/992: APGPL/AAQ/13/03/2017/02
3. RL PURAM (VIL) : AAQ/03/17/993: APGPL/AAQ/13/03/2017/03
4. CHIMAKURTHI (VIL) : AAQ/03/17/994: APGPL/AAQ/13/03/2017/04

TEST RESULT

Samples are analyzed "as is where basis is"

S. No	Parameter	Method	Units	Result				Standards
				Project site	Main Gate	RL Puram Village	Chimakurthi Village	
1	PM_{10}	IS 5182: Part 23 : 2006	µg/m³	70.6	60.2	52.9	53.8	100
2	$PM_{2.5}$	CPCBs Guidelines Volume – 1 (2012-13)	µg/m³	28.2	23.9	20.6	21.1	60
3	SO_2	IS 5182: Part 2 : 2001	µg/m³	16.1	13.7	12.0	12.2	80
4	NO_X	IS 5182:Part 6 :2006	µg/m³	19.8	16.9	14.8	15.1	80
5	CO	CO Analyzer	mg/m³	0.9	0.6	<0.1	<0.1	02

Opinion and interpretation: Nil

NA: Not Applicable

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PM_{10} Instrument Model: Lata Envirotech APM-860, Calibration valid up to: 18-05-2017
$PM_{2.5}$ Instrument Model: Lata Envirotech APM-154, Calibration valid up to: 18-05-2017
CO Analyzer Instrument Model: VS70-CO, Calibration valid up to: 28-02-2018

Checked By
(N.Kamalakar)
Sr.Chemist

Authorized Signatory
(N.P.Viswanath)
Manager Laboratory

End of the Report

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TEST REPORT

Report No: KIWIS/ AEMA/Noise/16 /170/5

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest)Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report : 16-12-2016

Date of Monitoring : 06-12-2016

Sample Registration No : Noise/12/16/394/25, 394/26, 394/27 & 394/28

Sample Collected By : Kiwis Eco Laboratories Private Limited

Sample Description/Code : Noise Monitoring

Sub Contract Testing : NA

Location:

1. *Main Gate* : Noise/12/16/394/25: APGPL/Noise/06/12/2016/01
2. *Project Site* : Noise/12/16/394/26: APGPL/Noise/06/12/2016/02
3. *RL Puram Village* : Noise/12/16/394/27: APGPL/Noise/06/12/2016/03
4. *Chimakurthi Village* : Noise/12/16/394/28: APGPL/Noise/06/12/2016/04

TEST RESULT

S.No	Location	Day time dB(A)	Night time dB(A)	CPCB Standards	
				Day dB (A)	Night dB(A)
1	Main Gate	65.4	56.9	75	70
2	Project Site	71.6	65.6	75	70
3	RL Puram village	51.6	42.0	55	45
4	Chimakurthi village	52.6	42.2	55	45

Opinion and interpretation: Nil

NA: Not Applicable

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Sound Level Meter: Model No: SL 4030 (Calibration valid up to: 12-01-2017)

Checked By
(N.Kamalakar)
Sr.Chemist

Authorized Signatory
(N.P.Viswanath)
Manager Laboratory

End of the Report

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TEST REPORT

Report No: KIWIS/AEMA/ S/16/83/5

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report	*: 16-12-2016*	*Sample Collected by*	*: Kiwis Eco Laboratories Private Limited*
Date of sampling	*: 06-12-2016*	*Sample Condition*	*: Samples received in Plastic Covers*
Sample received on	*: 09-12-2016*	*Sampling Procedure*	*: KIWIS/SOP/ Lab - 258*
Analysis starting date	*: 09-12-2016*	*Sample registration no*	*: S/12/16/77/5*
Analysis completion date	*: 16-12-2016*	*Sample description/Code*	*: Soil Quality Monitoring At Project Site*
Sub Contract Testing	*: NA*		

1. *SOIL: S/12/16/77/5 : APGPL/06/12/2016/01(At Project Site)*

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TEST REPORT

Report No: KIWIS/AEMA/S/16/83/5

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result
1	*pH*	-	*IS 2720 (Part 26)-1987 (RA:2002)*	7.66
2	*Moisture Content*	%	*IS 9235-1979*	7.24
3	*Organic carbon*	%	*IS 2720 (part 22) – 1972 (RA:2010)*	0.25
4	*Ava. Calcium as Ca*	*mg/kg*	*STIDA&CGI*	486.94
5	*Ava. Magnesium as Mg*	*mg/kg*	*STIDA&CGI*	199.99
6	*Ava. Nitrogen as N*	*Kg/Hac*	*STIDA&CGI*	20.17
7	*Ava. Phosphates as P*	*Kg/Hac*	*STIDA&CGI*	17.92
8	*Ava. Potassium as K*	*Kg/Hac*	*FAO 2007*	29.11
9	*Cadmium as Cd*	*mg/kg*	*SW -846 3050B & 7130*	<2.0
10	*Chromium as Cr*	*mg/kg*	*SW -846 3050B & 7190*	<2.0
11	*Nickel as Ni*	*mg/kg*	*SW -846 3050B & 7520*	<2.0
12	*Lead as Pb*	*mg/kg*	*SW -846-3050B & 7420*	<2.0
13	*Copper*	*mg/kg*	*SW -846-3050B & 7210*	<2.0
14	*Zinc as Zn*	*mg/kg*	*SW-846-3050B & 7950*	30.2

Opinion and interpretation: Nil

NA: Not Applicable

- Reports pertained only to the submitted sample
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STIDA&CGI: Soil Testing in India; Department of Agriculture & Cooperation Ministry of Agriculture Government of India

Checked By

(N.Kamalakar)
Sr.Chemist

Authorized Signatory

(N.P.Viswanath)
Manager Laboratory

End of the Report

Note: This report is subject to the terms and conditions mentioned overleaf

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TEST REPORT

Report No: KIWIS/AEMA/W/16/253/6

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report	*: 16-12-2016*	*Sample Collected by*	*: Kiwis Eco Laboratories Private Limited*
Date of sampling	*: 06-12-2016*	*Sample Condition*	*: Samples received in Plastic bottles*
Sample received on	*: 09-12-2016*	*Sampling Procedure*	*: KIWIS/SOP/ Lab - 258*
Analysis starting date	*: 09-12-2016*	*Sample registration no*	*: W/12/16/344/7*
Analysis completion date	*: 16-12-2016*	*Sample description/Code*	*: Water Quality Monitoring*
Sub Contract Testing	*: NA*		***Near Project Site, Ground Water***

1. W/12/16/344/7 : APGPL/06/12/2016/01 (Ground Water)

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result	IS 10500 Acceptable Limits	IS 10500 Permissible Limits
1	Color	CU	APHA 2120 C	<5.0	5	15
2	pH @ 25.8°C	-	APHA 4500H+ B	7.63	6.5-8.5	No relaxation
3	Turbidity	NTU	APHA 2130 B	<1.0	1	5
4	Electrical Conductivity	µMho/cm	APHA 2510 - B	1121	Not Specified	Not Specified
5	Total Dissolved solids	mg/L	APHA 2540 C	650	500	2000
6	Total Suspended Solids	mg/L	APHA 2540 D	<10	Not Specified	Not Specified
7	Alkalinity as $CaCO_3$	mg/L	APHA 2320 B	282.80	200	600
8	Hardness as $CaCO_3$	mg/L	APHA 2340 C	435.60	200	600
9	Calcium as Ca	mg/L	APHA 3500 Ca B	59.51	75	200

Note: This report is subject to the terms and conditions mentioned overleaf

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TEST REPORT

Report No: KIWIS/AEMA/ W/16/253/6

TEST RESULT

Samples are analyzed "as is where basis is"

S.No	Parameter	Unit	Method	Result	IS 10500 Acceptable Limits	IS 10500 Permissible Limits
10	Magnesium as Mg	mg/L	APHA 3500-Mg B	69.76	30	100
11	Chlorides as Cl^-	mg/L	APHA 4500 Cl^- C	80.54	250	1000
12	Sulphates as SO_4	mg/L	APHA 4500 SO_4 D	61.74	200	400
13	Nitrate as NO_3	mg/L	APHA 4500 NO_3 B	21.92	45	No relaxation
14	Sodium as Na	mg/L	APHA 3500 Na B	68.50	Not Specified	Not Specified
15	Potassium as K	mg/L	APHA 3500 K B	3.50	Not Specified	Not Specified
16	Fluoride as F	mg/L	APHA 4500F- D	0.57	1.0	1.5
17	Iron as Fe	mg/L	APHA 3500 Fe B	0.60	0.3	No relaxation
18	Chromium as Cr^{+6}	mg/L	APHA 3500 Cr B	<0.05	0.05	No relaxation
19	Zinc as Zn	mg/L	APHA 3111 B	<0.2	5	15
20	Lead as Pb	mg/L	APHA 3111 B	<0.01	0.01	No relaxation
21	Manganese as Mn	mg/L	APHA 3111 B	<0.1	0.1	0.3
22	Cadmium as Cd	mg/L	APHA 3111 B	<0.003	0.003	No relaxation
23	Copper as Cu	mg/L	APHA 3111 B	<0.05	0.05	1.5
24	Cyanide as CN-	mg/L	APHA 4500 CN- C, E	<0.05	0.05	No relaxation

Methods follow: APHA 22nd Edition
NA: Not Applicable

Opinion and interpretation: Nil

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Checked By

(N.Kamalakar)
Sr.Chemist

Authorized Signatory

(N.P.Viswanath)
Manager Laboratory

End of the Report

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TEST REPORT

Report No: KIWIS/AEMA/AAQ/16/299/5

Name and address of the client

M/s. Andhra Pradesh Granite (Midwest) Pvt. Ltd.
Sy No. 55/5P, 19.425Hac
RL Puram Village
Chimakurthi Mandal,
Prakasam District, Andhra Pradesh.

Date of report	*: 16-12-2016*	*Sample Collected by*	*: Kiwis Eco Laboratories Private Limited*
Sampling date	*: 06-12-2016*	*Sample Condition*	*: Samples received in*
Sampling Duration	*: 24Hrs*		*Polythene Covers and Sample Bottles*
Sample received on	*: 09-12-2016*	*Sampling Procedure*	*: CPCB Guidelines (NAAQMS/36/2012-13)*
Analysis starting date	*: 09-12-2016*	*Weather Conditions*	*: Dry*
Analysis completion date	*: 16-12-2016*	*Sample registration no*	*: AAQ/12/16/718/17,718/18,718/19 & 718/20*
Sub Contract Testing	*: NA*	*Temperature & Humidity*	*: 33°C & 59%*

Locations:

1. PROJECT SITE : AAQ/12/16/718/17: APGPL/AAQ/06/12/2016/01
2. MAIN GATE : AAQ/12/16/718/18: APGPL/AAQ/06/12/2016/02
3. RL PURAM (VIL) : AAQ/12/16/718/19: APGPL/AAQ/06/12/2016/03
4. CHIMAKURTHI (VIL) : AAQ/12/16/718/20: APGPL/AAQ/06/12/2016/04

TEST RESULT

Samples are analyzed "as is where basis is"

S. No	Parameter	Method	Units	Result				Standards
				Project site	Main Gate	RL Puram Village	Chimakurthi Village	
1	PM_{10}	IS 5182: Part 23 : 2006	µg/m³	72.9	65.7	56.8	57.2	100
2	$PM_{2.5}$	CPCBs Guidelines Volume – 1 (2012-13)	µg/m³	28.6	25.7	21.6	21.5	60
3	SO_2	IS 5182: Part 2 : 2001	µg/m³	22.8	19.4	15.6	14.8	80
4	NO_X	IS 5182:Part 6 :2006	µg/m³	26.0	21.6	18.7	19.2	80
5	CO	CO Analyzer	mg/m³	1.0	0.8	0.3	0.3	02

Opinion and interpretation: Nil

NA: Not Applicable

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PM_{10} Instrument Model: Lata Envirotech APM-860, (Calibration valid up to: 18-02-2017)
$PM_{2.5}$ Instrument Model: Lata Envirotech APM-154, (Calibration valid up to: 18-02-2017)
CO Analyzer Instrument Model: VS70-CO, (Calibration valid up to: 01-03-2017)

Checked By
(N.Kamalakar)
Sr.Chemist

Authorized Signatory
(N.P.Viswanath)
Manager Laboratory

End of the Report